Clinical Lectures
ON THE
RECTUM AND ANUS IN THEIR RELATIONS TO UTERINE, OVARIAN, AND PERIMETRIC DISEASES.

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LECTURE IV.

Effects of Pregnancy and Labour; Incontinence of Fæces; Constipation; Obstruction; Effects of Displacements of the Uterus; Diagnosis of Rectal from Uterine Disease; General Paralysis; Retention of Fæces, its effects; Malignant Disease; Perimetritis; Ovarian Disease; Blood, Pus, Bones, Hairs, &c., in Fæces.

ALTHOUGH the uterus is not in such intimate relation to the rectum as it is to the bladder, it is still so close to it in position that disorder or distress referred to the rectum is an extremely frequent complication of uterine disease or displacement. The unity of the pelvic vascular system is such that engorgement or inflammation of the uterus cannot fail to cause increased afflux of blood and hæmostasis in the other pelvic organs. To this increased flow of blood, determined by inflammation or congestion of the uterus, there is necessarily added the mechanical effect of increased weight and bulk. Thus two conditions already combine to cause accumulation of blood in the hæmorrhoidal vessels. A third condition is rarely wanting long. This is displacement of the uterus. The prolapsus consequent upon increased weight of the uterus, and the relaxation of its supporting structures, brings a further aggravation of pressure to bear upon the rectum just above the anus, increasing the difficulty under which the hæmorrhoidal vessels labour in unloading themselves.

To these mechanical influences in producing local vascular stagnation other remote and secondary causes bring a contingent of trouble. The gradual impairment of digestion and other nutritive functions, the enforced inactivity, consequent on uterine disease, entail constipation and loss of sphincteric tone. Hence the disposition of the hæmorrhoidal vessels to dilate, to become varicose, and to favour the formation of piles and thrombi, is enforced in a variety of concurrent ways.

The foundation of rectal and anal distress is often laid in pregnancy. The active developmental nisus, bringing to the pelvic vessels a large quantity of blood, leads to distension, to venectasis, which does not always subside after labour. The dilatation of the vascular plexuses around the lower part of the vagina and vulva arising during pregnancy has been already described. A similar condition is found around the anus; during labour, the extreme compression to which this part is subjected may retard the circulation in the vessels for several hours, and then, during the final act of expulsion, the tissues in which the vessels are embedded, being inordinately stretched, perhaps even lacerated, the vessels themselves undergo serious injury, from which they may never recover. At this stage there is often absolute eversion of the lower part of the bowel; the mucous membrane is exposed, swollen and livid from intense congestion; and sphincteric power is more or less impaired.

Pregnancy and labour form the frequent starting-point of hæmorrhoids in women. The same act of distension, whilst the parts are turgid with blood, sometimes causes small lacerations of the edge of the anus, which, not healing, become fissures or ulcers. In some cases, again, the sphincter is found to have lost something of its contractile power. This loss is complete, or nearly so, when the sphincter has been torn through, as in many cases of laceration of the perineum. In these cases, the want of power to retain the fæces—incontinence,—observed after labour, is usually enough to suggest the true nature of the case, and, examination being made, the injury is revealed. In whatever way these lesions may have arisen, they are apt to be kept up by uterine disease, the two conditions exerting a mutually vicious influence. On the other hand, hæmorrhoids, fissures, and ulcers of the rectum and anus may be primary, or at least exist independently of uterine disease or displacement. The symptoms they give rise to may be taken by the patient, and in the first instance by the medical attendant, as evidence of uterine disease. And disease of the rectum, if involving much congestion and pain and difficulty in the performance of its function, by the consequent accumulations and straining, may induce congestion and prolapse of the uterus. Here, as in the converse case, the morbid condition of each organ exerts a vicious influence upon the other.

The displacements of the uterus almost always induce some rectal complication. In prolapsus simple, or with the usual attendant retroversion, the uterus falls into the lower part of the sacral hollow, and therefore projects more or less into the anterior wall of the rectum. It induces some degree of obstruction, to overcome which increased bearing-down efforts are excited. This increases the evil. The progressive prolapsus causing inversion of the vagina, the retro-uterine peritoneal sac is dragged down, and then the anterior wall of the rectum is drawn into a pouch, constituting vaginal rectocele. It is a matter of observation that the reduction of the displacement is frequently followed by the return of healthy peristaltic action.

In anteversion, the vaginal portion of the uterus is tilted up and back, so as to form a conical projection into the rectal cavity, easily felt by rectal digital touch. If, as often happens, the vaginal portion is congested or inflamed, exquisite pain is experienced when a stool is being passed. In some cases this pain on defecation is felt only, or at least is felt with especial severity, at the menstrual epochs.

In retroversion and retroflexion, the body of the uterus, most probably enlarged and painful, presses into the anterior wall of the rectum, encroaching upon its calibre, acting as a ball-valve, causing a degree of obstruction, paralysis, dyschezia, and retrograde or ascending disorder of the intestinal canal. Sometimes, in retroversion of the gravid womb, the strain upon the rectum is so great that actual tenesmus is induced.

The diagnosis of rectal from uterine or vaginal disease can be made by direct examination. Symptoms such as pain on defecation, pain when the sphincter acts, discharges of mucus or blood from the anus, will of course point to the seat of disease. But direct inspection is necessary to determine not only what is the exact morbid condition, but also what is to be done. I have insisted upon the importance of rectal exploration as a means of making a correct diagnosis of uterine disease. Thus in the course of examining for uterine disease we often discover rectal complications. But apart from this incidental exploration, when symptoms referred to the anus are complained of, special examination of this part should be made. I have several times in this way detected a fistula which had not been suspected by the patient. The rectum and anus may be examined, first, by the touch. The finger, oiled, is passed into the rectum and made to explore the cavity as far as it will fairly reach. In this way a polypus may be felt, or any tumour or constriction in the cavity; and we may judge how far the intrusion of the displaced uterus may be a cause of distress. Secondly, we may bring the lower edge of the rectum inside the sphincter into view by the following manœuvre: pass the forefinger (having well pared down its nail) into the vagina above the perineum, so as to get its tip as fairly over the seat of the anus as possible; then by depressing this strongly, the lower part of the rectum is everted and made to protrude through the anus. In this way hæmorrhoids, fissures, or ulcers, and the state of the mucous membrane, can be seen. Or, thirdly, the anal speculum may be used. By this aid we obtain inspection of the mucous membrane higher up, and can see a polypus or other morbid condition that may exist.

It is almost superfluous to say that constant irritation of the bowel, and especially the loss of power to retain the motions, is motive enough for suspecting the existence of laceration of the sphincter and perineum. It may indicate general paralysis. In this case, however, other signs of nervous disease will probably be detected. But incontinence of urine and fæces may be the earliest manifestation. Thus

I have had patients brought to me principally on this account, the grave disease of the nervous centres being not yet suspected by the patient or her friends.

Diarrhœa is frequent at the menstrual epochs, due no doubt to the increased irritation of the mucous membrane and the hyperæmia induced.

If we follow a similar order to that observed in the case of the bladder, we shall first study the *significance of retention of fæces.* This will lead us to the investigation of the causes of *obstruction.* Now, the need of defecation is far less imperious than that of micturition. If the bladder is not relieved within twenty-four hours such urgent distress ensues as to compel attention. But accumulation may go on in the bowel for many days. There is a further difference. If we except the case of strangulated hernia, it is comparatively rare for complete obstruction of the bowel to come on suddenly, as does obstruction of the urethra. These two conditions render the approach and existence of bowel-obstruction more insidious and more difficult to realise. In the majority of cases bowel-obstruction from pelvic disease comes on very gradually. As the obstruction increases, defecation is more and more difficult and scanty. Retrograde dilatation of the intestine above the obstruction takes place, which, by giving more room for the lodgment of fæces, affords some compensation for the want of outlet; the absorption of the watery constituent of the fæces, and the more scanty food taken, further tend to postpone the climax and to prolong the delusion that we have to deal simply with obstinate constipation. The climax is at length determined by the distension of the belly—partly by flatus, partly by fæces; by the abdominal pain; by the sense of distress that never fails to attend the non-fulfilment of a necessary function; perhaps vomiting; surely loss of appetite; earthy, dirty, yellow tinge of skin, due to empoisonment from absorption of fæcal elements and bile—a condition analogous to urinæmia, and for which I have proposed the name "copræmia"; and by the failure of purgatives and enemata to bring away fæcal matter. When things have come to this pass, a strict examination is imperative. If exploration of the abdomen discover no sufficient cause, we must explore the pelvis. This is done by the vagina and rectum. The instruments needed are the finger, the sound or a whalebone probang, the aspirator-trocar, and the enema-syringe.

Retention may be incomplete or complete. The retention caused by retroversion of the gravid womb is rarely complete; and the distress arising being of quite minor importance to the attendant retention of urine, the subject need not detain us. But there are cases of incomplete fæcal retention caused by retroflexion of the enlarged uterus in which there may be no serious retention of urine. In these cases the enlarged body of the uterus, rolled back into the sacral hollow, compresses the anterior wall of the rectum against the posterior wall, acting like a ball-valve. To some degree this difficulty and its retrograde consequences attend most cases of retroversion or retroflexion of the uterus. It is sometimes more pronounced when there is impaction of the uterus enlarged by fibroid tumours. Examination by vagina and rectum will reveal the true nature of the obstruction; the uterine sound will lift the mass out of its false position, and then a suitable pessary will keep it from falling back. Thus complete relief to the bowel is often attained. Obstruction from pelvic cellulitis or peritonitis is diagnosed by the signs described in the second lecture.* But something more is required. The patient under chloroform, the finger is passed as high as possible into the rectum, and, following its course, we come to the constriction caused by the fibrinous deposit nearly encircling the bowel, and nearly closing it by concentric contraction. I saw a case in which things had gone to such extremes that death seemed imminent. The stricture barely admitted a bougie. The pelvic brim was occupied by a dense mass matting all the organs together. It was difficult to decide whether this was due to malignant disease or to simple inflammatory effusion. I suggested as the only apparent prospect of relief the resort to colotomy. Whilst this was being debated, suddenly an immense gush of pus took place, the bowel was liberated, and recovery ensued. Such a lesson could not be forgotten. In several cases which have since come under my care I have penetrated the mass by the aspirator-trocar, and have thus drawn off pus with manifest relief. The marks of irritative fever will aid in raising the suspicion of imprisoned pus. But this kind of evidence is not wanted to justify the puncture. The operation, as far as I may judge from a considerable number of observations, is quite harmless, and its value in diagnosis and treatment is so great that I think it should be resorted to in every instance where local or systemic distress is manifest. I have even seen reason to believe that punctures thus made for diagnostic purposes have had a curative action by stimulating absorption of the effused material.

It is necessary to be provided with special trocars. The ordinary ones supplied are not available for intra-pelvic use. Messrs. Weiss have made for me trocars eight or nine inches long, supported on a firm stem, which answer well. They can be adapted, like the ordinary needles, to the same mount of the aspirator-tube.

Another disease which may proceed in a similar manner, and lead up to the same result, is cancer. Whenever this dire disease invades the mucous outlets or canals, it tends to close them by gradual concentric contraction. We see this in the œsophagus, in the anus, the vagina, and the urethra. So when it extends from the uterus, invading the neighbouring structures, it not seldom seizes the rectum about the sigmoid flexure, surrounds it, and, gradually closing in, the tube is reduced to the smallest bore, so small as to be quite inadequate to the function of defecation. In this way cancer occasionally proves fatal. All the signs of copræmia and starvation precede. In such a case the only hope of reprieve lies in colotomy. We may puncture by the aspirator-trocar; but nothing beyond diagnostic satisfaction will be gained.

Ovarian tumours have caused death by obstructing the bowel. Dr. Parker* relates a case. Rokitansky describes fatal constriction caused by the rotation of an ovarian tumour. When symptoms of dangerous bowel-obstruction supervene in connexion with ovarian tumour the expediency of immediately proceeding to extirpation must be earnestly discussed.

I have recently seen with Dr. Risdon Bennett and Mr. Berry a case of suspended action of the bowels, instructive as illustrating a considerable class of cases. A muscular tube depends for its healthy work on the freedom of its muscular action. This action is liable to be arrested or paralysed if the tube be encroached upon by inflammatory or other deposit in such a manner as to interfere with its mobility, or to lessen its calibre. Nay, the mere proximity to an inflamed or enlarged organ seems often to be enough. Whenever a function can only be exercised at the cost of pain, the system instinctively tries to avoid pain by suppressing the function. And there may be other causes of nervous diversion leading to this induced local paralysis.

In the case to which I am now referring, a lady, aged fifty-two, had ceased menstruating for two years, when suddenly metrorrhagia set in, and on one occasion amounted to flooding. At the end of two months constipation supervened, resisting for fourteen days the frequent use of enemata and opium. There was vomiting, but never of stercoraceous quality. We detected a tumour, in all probability of recent formation, in the right broad ligament fixing the uterus. It was presumed to be a blood-tumour or hæmatocele resulting from the rupture of vessels of the ovary or in the broad ligament. Examining by rectum, I could not find that there was any marked closure of the bowel. The arrest of action of the bowel admits of explanation on the theory just enunciated. It is analogous to the paralysis of the intestines attended by tympanites, and to the bladder-paralysis of puerperal peritonitis.

As in the case of the bladder, so in that of the bowel, we have to consider the significance of abnormal matters in the excretion. In both cases these may or may not be indications of disease of the organ from which they flow. Thus, blood, mucus, pus, may be the manifestations of dysentery and ulceration of the intestine or of hæmorrhoids. But they may spring from quite different causes. For instance, blood in considerable quantity is sometimes discharged in pregnancy, and in some forms of disordered menstruation. Whenever blood comes from the bowel apart from the obvious conditions of fever, dysentery, or liver disease, the possibility of pregnancy should be considered, and the pelvic portion of the bowel, with its relations, should be carefully examined.

* THE LANCET, Feb. 6th, 1875.

* Edin. Med. Journ., 1863.

Blood may come from a pelvic hæmatocele. It may issue from a dermoid or cystoid tumour. So may pus, hair, or bones, or teeth. Indeed, the rectum is the often elected channel for the voidance of the contents of most of the pelvic tumours. Abscesses resulting from pelvic inflammations most frequently empty themselves by this road; and this is also the favourite channel for the elimination of the fœtal elements of extra-uterine gestation cysts. Intra-pelvic examination is essential for the recognition or the exclusion of these conditions. And this examination must be thorough. In urgent cases it may even be necessary to pass the whole hand into the rectum—of course whilst the patient is in a state of anæsthesia.

One lesson will be drawn from the clinical deductions made in these studies of the relations of bladder and bowel distress to disease of the neighbouring structures. You will see how impossible it is to pretermit close examination of the surrounding organs without serious risk of overlooking conditions that may be fatal if neglected, and which may be remedied if discovered. Whilst we are looking at the kidneys or the intestine, because they are disturbed in their functions, it may be the uterus or the ovaries that are in fault. We thus see how dangerous it is to practise in the spirit of pure specialism; how absurd it is to map out the body, and assign particular territories to particular classes of practitioners. You will see how intimately, how indissolubly that part of medicine which takes for its basis the particular study of the generative system in woman, is linked with the disorders of the alimentary, vascular, and nervous systems: that is, a pure specialty cannot exist. A more monstrous thing cannot be conceived.

Hunterian Lectures
ON
SYPHILIS,
AND ON
SOME LOCAL DISEASES AFFECTING PRINCIPALLY THE ORGANS OF GENERATION.

Delivered at the Royal College of Surgeons of England,

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INTRODUCTION: INOCULATION OF SYPHILITIC BLOOD.

IN the previous lecture we considered Hunter's idea of the life of the blood, the way in which that ministered to the growth of every part; and, as illustrated by one disease, the way in which the nutrition of every part might be interfered with when that life was touched. In the present lecture we will consider the morbid processes by means of which it is so influenced.

The results produced in the human body by the syphilitic poison are so various, affect a patient's constitution at such different periods, and are apparently so dissimilar in different cases, that it is necessary in studying this disease to distinguish accurately if possible between the essential actions which belong to the disease itself, and the various complications which may arise from lapse of time, from weakness of constitution, from the differences in the manifestations in its earlier and later stages, and especially from effects of accidental complications, or from the modifications produced by its recurrence.

Hunter prefaces his treatise on the venereal disease by the description of four morbid processes or actions, to which he constantly refers in his subsequent remarks. Since his day the nomenclature of these actions has been much varied and altered; but, as conveying any distinct and definite ideas, I do not think that it has been improved. These actions he calls the adhesive inflammation, the suppurative inflammation, ulceration, and mortification.

But in order to make his description of these processes available for our present purpose we must also consider how these actions are modified by the structures in which they occur.

An animal body, Hunter observes, is composed of a variety of substances, and we have an opportunity of observing the comparative progress of disease in them, and their comparative powers of restoration, and we find that they differ very much from each other in those respects. The healthy and morbid processes in growth, decay, and repair are, however, regulated by the same living principles, or, if we please, guided by the same hand, in all living beings and in all diseases. In diseases arising from accident, a great difference in the degree of action takes place, according to the nature of the parts implicated: thus bone, tendon, ligament, and cellular membrane go through their morbid actions more slowly than muscle or skin. This principle is also abundantly illustrated in the different morbid processes produced by venereal diseases.

The same kind of action which produces an effusion of lymph upon the iris may, if it attacks the skin, be followed by a variety of modifications in the growth and development of the cutis or its coverings. If the cellular membrane be affected, an indolent tumour may result, which goes comparatively slowly through its stages, and may terminate in mortification, or perish by a still slower process of molecular necrosis. In the bones the same disease produces an increased development of bone, ulceration, or necrosis. In the lymphatic glands an enlargement is produced, confined strictly to those glands themselves, and not involving—at least, in the first instance, in any degree—the surrounding structures.

In internal organs the same disease may produce deposits, such as are illustrated in this preparation of syphilitic disease of the lung, and in this of syphilitic deposit in the liver. These deposits may be more or less perfectly absorbed, or more or less perfectly transformed, in the processes of nutrition and growth into tissue, resembling that of the organ in which they occur.

CASE 12.—A gentleman has a secondary syphilitic eruption and symptoms of disease of the lung. For the latter disease he consulted a number of medical men, and was for a long time under treatment. The symptoms, however, persisted. As he wished to go abroad, I was requested by Dr. Tuke to see him for his secondary symptoms before he went, and he was accordingly placed under treatment, which he had not time fully to carry out, but the eruption almost entirely disappeared, and with it all his lung symptoms. These had not returned two years afterwards.

CASE 13.—A patient in the Lock Hospital, many years ago, was pronounced by the physicians of the hospital to have one lung in great part consolidated. I did not know at the time what the disease might be, but I thought I would, at all events, treat his secondary symptoms. These disappeared, and with them the lung affection, and he was seen some months afterwards in apparently perfect health, following his occupation as an omnibus conductor.

The most important modification of increased action, as far as our present subject is concerned, is that which is observed in mucous membranes as compared with other structures in the body.

Hunter showed that a mucous membrane under violent irritation would, like a serous membrane, produce lymph; but, generally speaking, inflammation of a mucous membrane terminates either in resolution, an increased secretion of mucus, or in suppuration. But although the secretion from the surface of a mucous membrane differs in general from that of a serous membrane, yet the membranes themselves may be affected in a similar way. Effusion of new material may take place in their structures, and in the cellular tissue in contact with them. They may both become infiltrated, thickened, and permanently altered. With regard to the serous membranes, we often see an example of this, as in the case of old omental herniæ; and with regard to the mucous membranes, most interesting examples are afforded, in illustration of our present subject, in the formation of mucous tubercles, and in the more or less permanent thickening of the mucous membrane of the urethra. These will hereafter occupy our attention particularly. I will only at present note that the mucous membrane of the urethra may be thickened by the syphilitic poison, as shown by cases similar to the following, which in practice are not very uncommon.

CASE 14.—A young gentleman contracted syphilis, followed by secondary symptoms. He had never had gonorrhœa. In the course of the manifestation of the secondary affection